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Constellation Audio Pictor preamp and Taurus Stereo power amplifier by Alan Sircom



onstellation Audio needs little introduction but a lot of explanation. The products were famously made by a 'dream team' of designers given a blank sheet and the lone requirement of "make the best one you always wanted to, if price were not a consideration". These basic circuits form the core of every range of Constellation Audio. You get more and better the further up the Constellation Audio range you go.

This has two big advantages; there is a consistency of sound and upgrading is easy. You can pick and mix a system from different ranges (up to a point - using the Hercules power amps from the Reference series with the Inspiration Preamp 1.0 isn't going to benefit either product) without ever leaving the Constellation ecosystem (perhaps that should be 'universe'). Revelation is Constellation's middle range, comprising the Pictor preamp, both a stereo and a mono version of the Taurus power amplifier, and the Andromeda phono stage. Above Revelation are Performance and Reference ranges, and below is Inspiration and the still-to-be-launched Leo system in the upcoming Dominion range. There are phono stages in everything above Inspiration and the Performance range includes Constellation Audio's lone digital source, Cygnus.

Revelation was launched in 2017 to fill the space between Inspiration and Performance, and both the Pictor line preamplifier and Taurus Stereo power amplifier do that in a visual and audible sense. If anything, they lend themselves more toward the Performance; no mean feat as Performance is considerably more demanding and built to a standard few can attain. While it would be both wrong and dismissive to paint the Pictor as a Virgo III in Preamp 1.0 livery, or the Taurus Stereo as a Centaur II in a Stereo 1.0 chassis, there's more than a grain of truth in the notion. That's no compromise - the touchy-feely of the Pictor and Taurus Stereo are exceptional... until you start to run your hands over the Virgo III or Centaur II. The Pictor/Taurus feel smooth almost like the shell >



of an Apple product, where the textured feel of the Virgo/Centaur is like some kind of polymer metal that James Cameron could base a movie around. The modular nature of the original circuit designs means that the Revelation series models retain much of the, erm, performance of the Performance line, just with a few of the extremes smoothed away.

Take the Pictor, for example. It uses the same Line Stage Gain Modules found in the Virgo III and originally designed for the lofty Altair II; a unique design that uses a servo circuit to monitor and maintain the balance between the positive and negative halves of the audio signal. This means when Pictor is used with a Constellation power amplifier, the Constellation Link may be employed, maximizing sound quality by bypassing the power amplifier's gain stage. It also uses the same basic circuit topology and even the same separate power supply module as the bigger preamp. Internally at least, the main change is fewer inputs, with three RCA and three XLR inputs in place of the four each in the Virgo III.

The other difference between the preamplifiers is that in the case of the Altair II, the components used are all the rarest of the rare (including long-discontinued components chosen for their sound quality), and the level of physical isolation even heftier amounts of aluminium can bring. Even so, the Pictor's audio circuit boards mount on a thick metal plate, which is 'floated' using soft, pliable isolators, while key chassis components are machined from think aluminium slabs. The sheer mass of the metal makes it harder for vibrations to affect a preamplifier, and the unusually thick panels are capable of blocking any electromagnetic or radio-frequency interference commonly encountered in a home. The Pictor is extremely well isolated from these forms of interference, but the Virgo III and the Altair II take this isolation to the extreme... and then beyond.

The Taurus is more immediately recognisably distinct from the Performance line (with the Pictor, the give-away is the sculpting around the display panel and the depth of the finish), because it's quite a bit smaller. In fact, the Taurus chassis is only slightly deeper than the Stereo 1.0 of the Inspiration line, and stands less than 22cm tall. Regardless, it still features Constellation Audio's fully-balanced Line Stage Gain Module input stage, using the same topology found in the company's preamps. That identical nature of design has a secondary bonus, as a Direct input can connect a Constellation preamp to the Taurus, by-passing the power amplifier's own input stage in the process.

The modular nature of Constellation Audio designs means the Taurus shares the same Balanced Bridged amplification circuits found throughout. These are identical 125 watt, single-ended modules, which all feature only NPN output transistors. Unlike a conventional amplifier circuit (where NPN transistors drive the positive half of the signal and PNP transistors power the negative) using NPN transistors only in the output of each module eliminates the difference between the two types of output device, reducing a potential blurring of fine detail. To make a 250 watt amplifier like the Taurus requires two such modules, while the Centaur 500 Stereo from the Performance range doubles the number of modules to double the power output.

The modular layout of the Constellation Audio power amp design has a unique benefit that – once experienced – is hard to >



roll back from. It's essentially banks of small amplifiers put together to make a big amplifier, and the Taurus takes the benefits from both. So, you get the delicacy, subtlety, and musical integrity of a small amplifier coupled with the power and dynamic range you expect from a big power amp. It simultaneously appeals to the buyer of typically European and Brit-fi amplifiers (small, fast, musically engaging, but lacking power to grip a pair of full-range speakers) and the buyer of more powerful American amps (which offer control, depth, and slam, but sometimes at the expense of those quicksilver musical reactions). That makes the amplifier a musical Rosetta Stone; to the music lover weaned on 30W Class A designs, it demonstrates the need for power, while the person who cut their musical teeth on sub-kilowatt powerhouses gets to understand why there's more to life than grip. Neither have to compromise.

All of which means the Constellation Audio approach is uniquely open. The dark art of matching amplifiers to loudspeakers is less of a concern here, because the amplifiers have that rare combination of gripping the loudspeaker tightly by the drive units and yet – somewhat paradoxically – allowing it the freedom to express itself in the way it always wanted to. This makes the Pictor and Taurus at once uniquely satisfying to listen to, and uniquely frustrating to write about, as you realise that you are actually defining the sound of the Constellation Audio equipment by the sound of the sources and speakers to which it is connected. The oft-touted, never-achieved goal of an amplifier being 'a straight wire with gain' is closer here than in many designs.

This nature also extends to personal sonic 'triggers' that one focuses on in assessing a component. If you talk to another audiophile about the Pictor and Taurus, it's as if you are discussing another set of amplifiers, because

"Pinning down the sound is like trying to grasp musical smoke."

you are focused on the soundstaging, and they were struck by the quality of the timbre. If you seek sonic holography, you'll find it here to impressive levels, but if you seek musical integrity and beat-precision, you'll find it here too, and to the same degree of impressiveness. Detail hounds, those who define their music by dynamics micro and macro, those who seem obsessed by vocal articulation (one of my triggers), or the overall coherence of the sound... most will see the Pictor and Taurus as 'their' amplifier, one that was also made for 'their' loudspeakers. Pinning down the sound is like trying to grasp musical smoke... in a good way.

In fact, the best musical example of how the Constellation Pictor and Taurus behave is to listen to them in the company of an equally musically-driven friend, family member, or associate. Judge the success of a product by the number of recordings you acquire from your side-kick's music collection, and how many of your pieces of music they reach for. Constellation takes this to new extremes, said the guy who ended up buying a Melba Moore disco album, La Voz by Xiomara [Chesky, SACD], and dug out the almost forgotten Whites Off Earth Now album by the Cowboy Junkies [Latent], while introducing Nils Frahm, the XX, and Rag 'n' Bone Man to someone a few decades off the target demographic for those artists.

The Pictor and Taurus are also paradoxical in performance in that they at once reveal all the performance criteria in a loudspeaker while bringing out its musical enjoyment. This left me stumped, as these are typically polar opposites; an amplifier that's 'revealing' is often musically barren, while an amplifier that turns every session into an entertaining jaunt through your collection is routinely masking the limitations inherent to the speaker design.

"Give it a few days, however, and you will think most pre-power connections border on the crude and rough-edged."

The Constellation Audio duo are unique in they show you exactly what your equipment is doing honestly and accurately, and yet make that experience as musically satisfying as it can be. Meaning it is at once the perfect tool for the designer wanting to know where the next speaker can be improved and the salesperson wanting to make their speakers sound great – that is a first, and bespeaks of the quality and accuracy of the Constellation Audio sound.

The Direct input is interesting, although I suspect not everyone will take to it at first. We are programmed to like a little distortion in life, it seems, and the addition of that extra input stage in the power amplifier makes the Pictor/Taurus combination sound a little more like its peers. When you try the Direct for the first time, you might find that absence of a slight sheen across the music 'too refined'. Give it a few days, however, and you will think most pre-power connections border on the crude and rough-edged. That sounds like audio snobbery at its acme – "power amp input stages are just so jejune!" – but that's what you hear and that's how you change in hearing the Constellations working in tandem.

At this level, you don't really encounter downsides, just different approaches to the same goal. Someone buying a DartZeel is never going to be truly happy with D'Agostino, and vice versa. So it is with Constellation Audio; that combination of absolute detail and absolute control is not for everyone, and the 'small amp writ big' presentation might not appeal to those wedded to either a small amp sound or a huge amplifier sound. But at this level, we are in 'how do you take your coffee?' territory.

Pictor and Taurus are the secret sweet spot of Constellation Audio. More buys you better, but mostly it buys you 'more'. More inputs in the preamp, more power in the power amp. Yes, you also get more fluidity and detail, but we're at a fairly high degree of nuance here. What you get when you move up from Revelation to Performance is the kind of mechanical isolation, depth of finish and industrial design that puts a lot of the audio industry to shame and that all has a profound effect on sound quality. That's not to say Revelation has any rough edges or sounds compromised by comparison, but it's like the difference between two and three Michelin stars; Revelation is like a two-star restaurant, which gets you the finest food, wine, and service in one of the best restaurants in the world, but the three stars of Performance gets you the audio equivalent of a gastronomic tour-de-force. As to the Reference Line... well that's like having Alain Ducasse, Thomas Keller, Clare Smyth, and Seiji Yamamoto on speed-dial!

Constellation Audio is one of the hottest properties in audio electronics at the moment. And judging by the performance of the Pictor line preamp and Taurus stereo power amp from its Revelation line, it's not hard to see why it's such hot property. If you want a system to be honest without forcing that honesty down your throat, your next amp is a Constellation. It's written in the stars!

TECHNICAL SPECIFICATIONS

Pictor line preamplifier

Inputs: 3× XLR stereo, 3× RCA stereo, USB (for control) Outputs: 2× XLR stereo, 2× RCA stereo, 12v trigger Frequency response: 10Hz–100kHz, ±0.5dB THD+N: <0.001%, 20Hz–20kHz at 2V output Signal to noise ratio: >-105dB, A weighted Dimensions (W×H×D): 43.2 × 13.3 × 38.1cm (preamp),

43.2 × 7 × 36.8cm (PSU) Weight: 20.4kg (preamp), 10kg (PSU) Price: £20,998

Taurus power amplifier

Inputs: 4× XLR (2× XLR for Constellation Link), 2× RCA Outputs: binding posts Power output: 250W into 8Ω, 500W into 4Ω Frequency Response: 10Hz–100kHz, +1/-0.5dB THD+N: <0.05% (1kHz at rated power) Dimensions (W×H×D): 43.2 × 21.6 × 58.4cm Weight: 54.4kg Price: £22,998

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